# State of Hawaii DEPARTMENT OF LAND AND NATURAL RESOURCES Division of Forestry and Wildlife Honolulu, Hawaii 96813

March 14, 2007

Chairperson and Members Board of Land and Natural Resources State of Hawaii Honolulu, Hawaii

Land Board Members:

SUBJECT: Request for Approval of the Placement of Hazard Warning and

Management Signs on Improved Public Lands at Various Locations Under the Jurisdiction of DOFAW on Kauai, Maui and Hawaii Pursuant to Act

82, Session Laws Hawaii, 2003

Act 82, 2003 Session Laws Hawaii, Relating to Public Land Liability, established a process for installing and maintaining warning signs on improved public lands, and provides the State and Counties with protection from liability for damages caused by the dangerous natural conditions that are identified through the signage. Pursuant to Act 82, the Board is to review and approve of the design and placement of these signs. The Board, following the recommendations of the Risk Assessment Working Group, previously approved the sign designs and sign placement at a number of park and trail locations.

## Sign Placement Criteria

# Pursuant to Chapter 8, HAR, the following guidelines have been used for determination of the placement of signage:

- §13-8-9 <u>Public use and exposure.</u> (a) Traffic patterns and managed access points of people accessing the improved public lands shall be considered when placing signs. (b) The type, frequency, and location of incidents or potential public exposure relating to specific dangerous natural conditions when known on the improved public lands shall be considered when placing signs.
- §13-8-10 Placement. Sign(s) shall be placed at or near access points; i.e., along vehicle and pedestrian traffic corridors in clearly visible locations placed as close as possible to the potentially dangerous natural conditions on improved public lands and at managed and designated entrances where the signs will be seen as users enter improved public lands. View sheds, aesthetics, and feasibility of installation shall be considered in the placement of the signs. Signs shall be installed with consideration for the average

adult line of sight but outside of the general path of travel to avoid physical contact with the signs. Signs may be attached to posts or by any other method of installation depending on the nature of the location and terrain.

Attached are Exhibits A, B and C for entrance and site-specific signs warning of dangerous natural conditions and ancillary management conditions.

#### **RECOMMENDATION:**

#### That the Board:

1. Approve the placement of the signs at the locations as depicted on Exhibits A. B and C.

Respectfully submitted,

Administrator

#### Attachments:

Maps depicting the placement of signs for locations on Maui Exhibit A:

Map depicting the placement of signs for locations on Hawaii Exhibit B:

Map depicting the placement of signs for locations on Kauai Exhibit C:

APPROVED FOR SUBMITTAL:

Board of Land & Natural Resources

## EXHIBIT: A

DLNR Division: DOFAW Island: Maui Unnamed Site - Puohokamoa

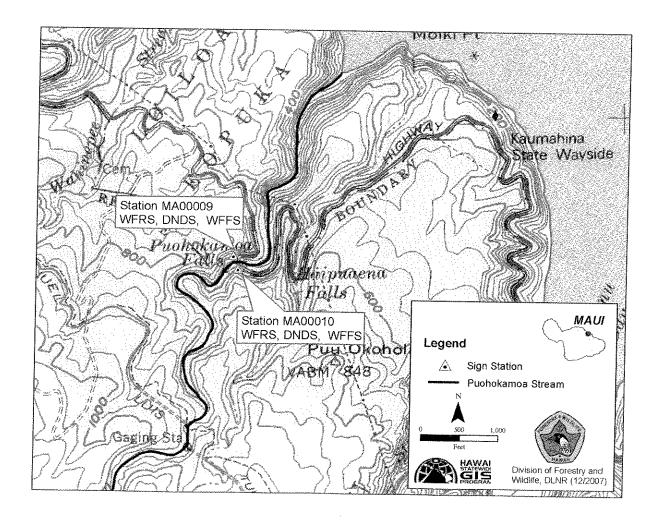
Stream

Exposure to natural conditions: Falling rocks, stream crossings, shallow water with

submerged hazards

Site Specific Hazard Signs:

Station: MA00009 Station: MA00010 Station: MA00009 Station: MA00010	Warning - Falling Rock Warning - Falling Rock Danger - No Diving or Jumping Danger - No Diving or Jumping	(WFRS) (WFRS) (DNDS) (DNDS)
Station: MA00009	Warning - Flash Flood	(WFFS)
Station: MA00010	Warning – Flash Flood	(WFFS)



#### EXHIBIT: A

DLNR Division: DOFAW Island: Maui Trail Name: Keanae Arboretum

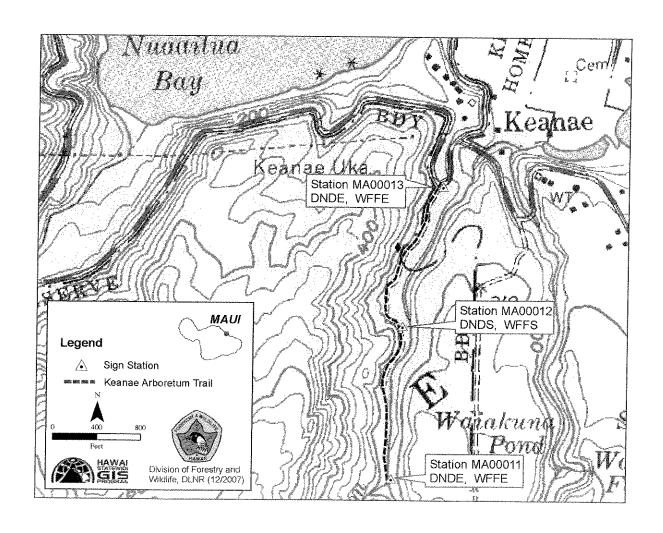
Exposure to natural conditions: Stream crossings, shallow water with submerged hazards

**Entrance Hazard Signs:** 

Station: MA00011Danger - No Diving or Jumping(DNDE)Station: MA00013Danger - No Diving or Jumping(DNDE)Station: MA00011Warning - Flash Floods(WFFE)Station: MA00013Warning - Flash Floods(WFFE)

Site Specific Hazard Signs:

Station: MA00012 Danger – No Diving or Jumping (DNDS)
Station: MA00012 Warning- Flash Floods (WFFS)



#### EXHIBIT: A

**DLNR** Division:

DOFAW

Island: Maui

Trail Name: Pi'ilani

(Waianapanapa section)

Exposure to natural conditions:

Cliffs

**Entrance Hazard Signs:** 

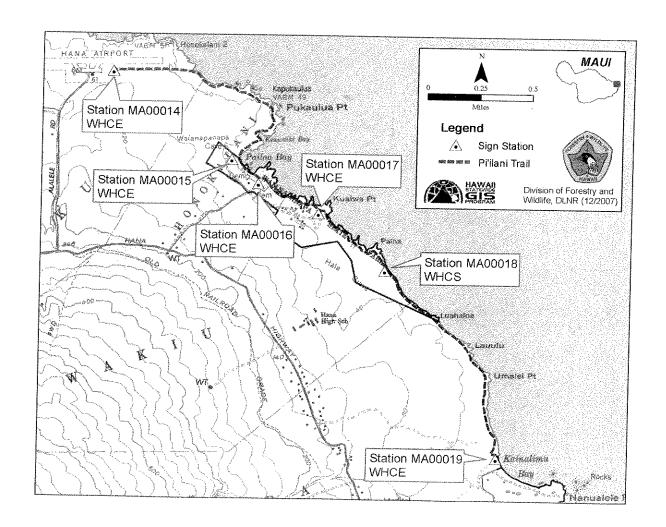
Station: MA00014 Warning – Hazardous Cliffs (WHCE)
Station: MA00015 Warning – Hazardous Cliffs (WHCE)
Station: MA00016 Warning – Hazardous Cliffs (WHCE)
Station: MA00017 Warning – Hazardous Cliffs (WHCE)
Station: MA00019 Warning – Hazardous Cliffs (WHCE)

Site Specific Hazard Signs:

Station: MA00018

Warning – Hazardous Cliffs

(WHCS)



DLNR Division: DOFAW Island: Hawaii Trail Name: Kaheawai

**Exposure to natural conditions:** Stream crossings, falling rocks

**Entrance Hazard Signs:** 

Station: HA0000 Warning - Falling Rocks (WFRE)

Warning- Flash Floods (WFFE)

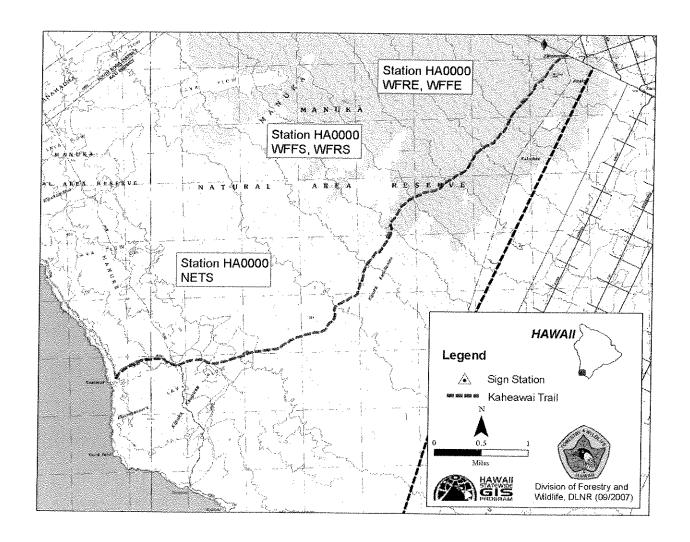
Site Specific Hazard Signs

Station: HA0000 Warning - Falling Rocks (WFRS)

Warning- Flash Floods (WFFS)

**Management Signs:** 

Station: HA0000 End of maintained trail (NETS)



DLNR Division: DOFAW Island: Hawaii Trail Name: White Road

**Exposure to natural conditions:** Cliffs

**Entrance Hazard Signs:** 

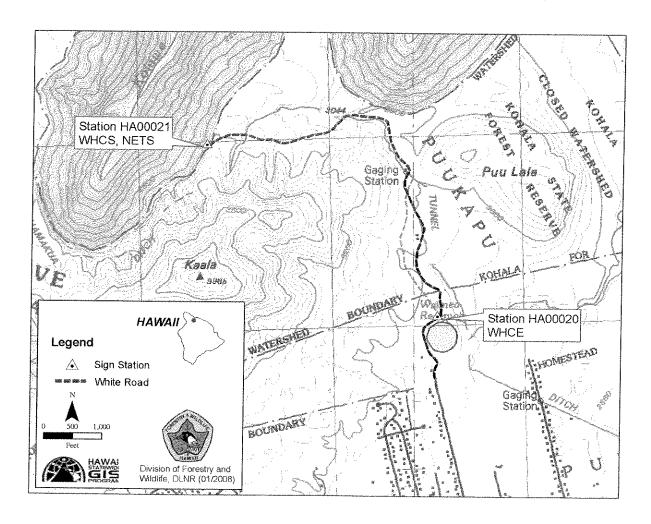
Station: HA00020 Warning – Hazardous Cliffs (WHCE)

Site Specific Hazard Signs:

Station: HA00021 Warning - Hazardous Cliff (WHCS)

Management Signs:

Station: HA00021 End of Trail (NETS)



DLNR Division: DOFAW Island: Hawaii Trail Name: Kapaloa Falls

**Exposure to natural conditions**: Cliffs, falling rocks, shallow water with submerged hazards

**Entrance Hazard Signs:** 

Station: HA00022 Warning - Falling Rocks (WFRE)

Warning - Hazardous Cliffs (WHCE)

Danger – No Diving or Jumping (WNDE)

Site Specific Hazard Signs:

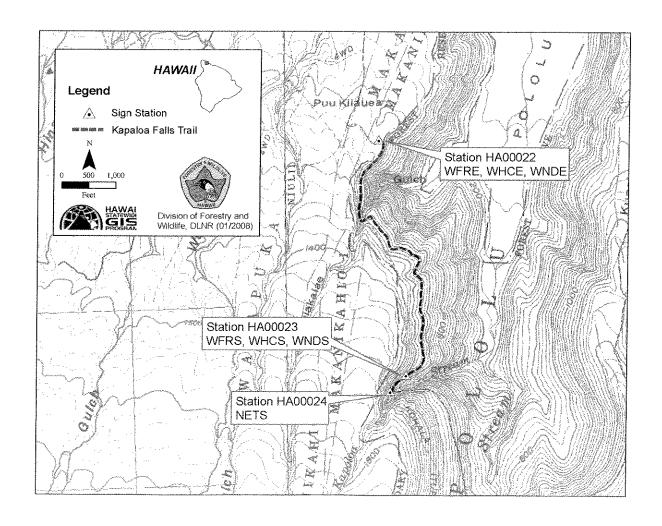
Station: HA00023 Warning - Falling Rocks (WFRS)

Warning - Hazardous Cliffs (WHCS)

Danger - No Diving or Jumping (WNDS)

**Management Signs:** 

Station: HA00024 End of Trail (NETS)



DLNR Division: DOFAW Island: Hawaii Trail Name: Pololu

**Exposure to natural conditions:** Stream crossings

**Entrance Hazard Signs:** 

Station: HA00013 Warning - Flash Flood (WFFE)

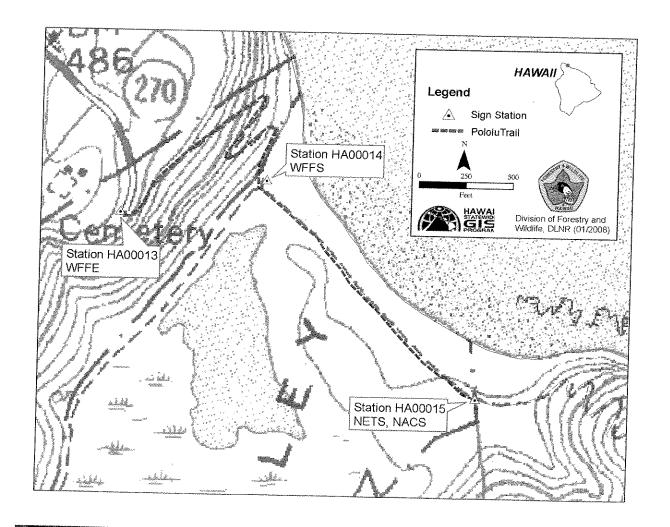
Site Specific Signs:

Station: HA00014 Warning Flash Flood (WFFS)

Management Signs:

Station: HA00015 End of Trail (NETS)

Area Closed (NACS)



**DLNR Division:** 

DOFAW

Island: Hawaii

Trail Name: Ala Kahakai

Exposure to natural conditions:

Cliffs

**Entrance Hazard Signs:** 

Station: HA00016

Warning - Hazardous Cliffs

(WHCE)

Site Specific Signs:

Station: HA00017

Warning - Hazardous Cliffs

(WHCS)

Station: HA00018

Warning - Hazardous Cliffs

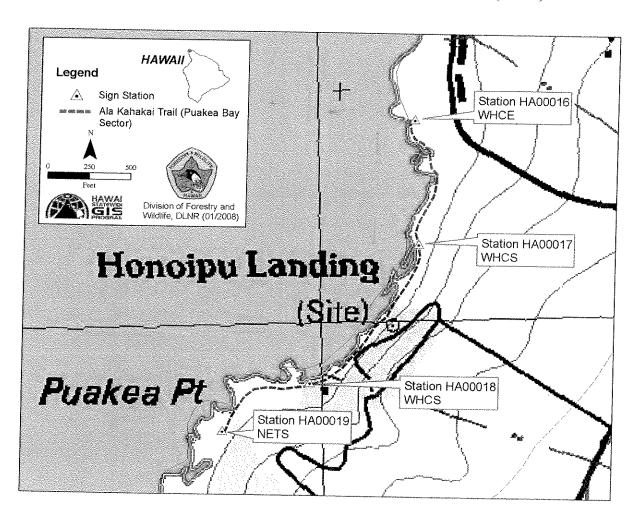
(WHCS)

Site Specific Management Signs:

Station: HA00019

End of Trail

(NETS)



DLNR Division: DOFAW Island: Kauai

Trail Name: Nounou Mountain East/West Exposure to natural conditions: Cliffs

**Entrance Hazard Signs:** 

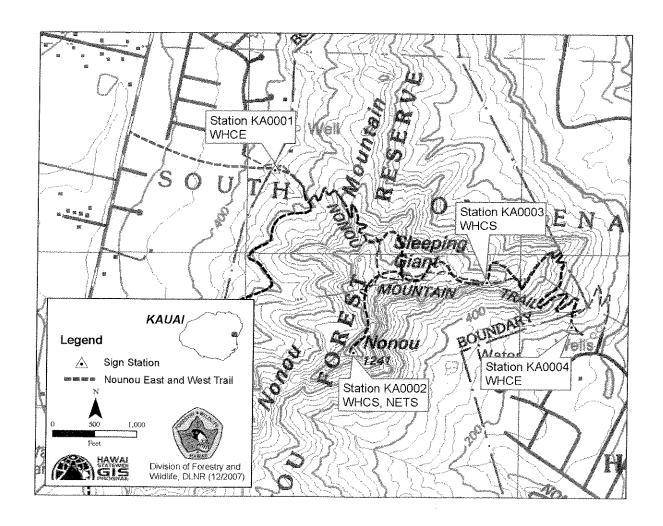
Station: KA00001 Warning - Hazardous Cliffs (WHCE)
Station: KA00004 Warning - Hazardous Cliffs (WHCE)

Site Specific Hazard Signs:

Station: KA00002 Warning – Hazardous Cliffs (WHCS) Station: KA00003 Warning – Hazardous Cliffs (WHCS)

**Management Signs:** 

Station: KA00002 End of Trail (NETS)



DLNR Division: DOFAW Island: Kauai Trail Name: Nu'alolo Cliff

Exposure to natural conditions: Cliffs

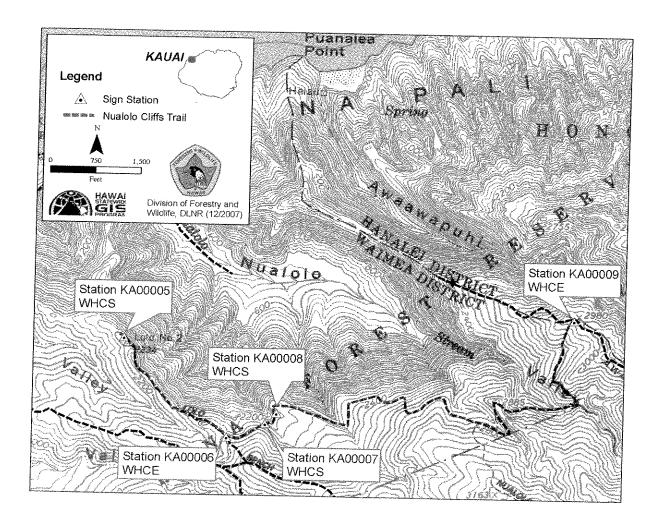
**Entrance Hazard Signs:** 

Station: KA00006 Warning - Hazardous Cliffs
Station: KA00009 Warning - Hazardous Cliffs (WHCE)

(WHCE)

Site Specific Hazard Signs:

Station: KA00005 Warning - Hazardous Cliffs (WHCS)
Station: KA00007 Warning - Hazardous Cliffs (WHCS)
Station: KA00008 Warning - Hazardous Cliffs (WHCS)



DOFAW Island: Kauai Trail Name: Awa' awapuhi

Exposure to natural conditions: Cliffs

**Entrance Hazard Signs:** 

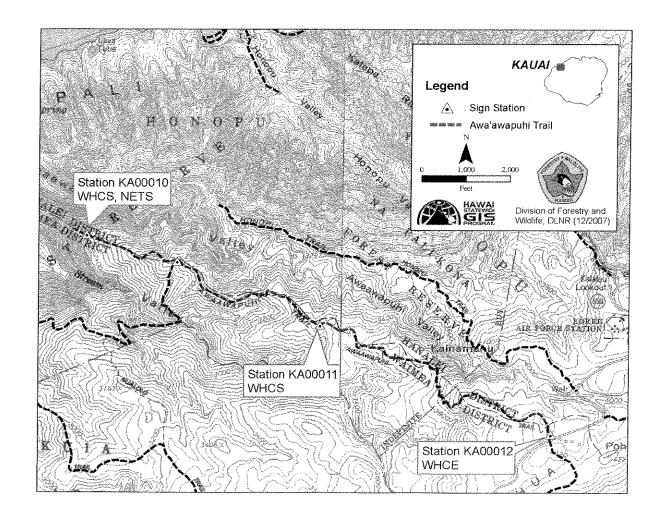
Station: KA00012 Warning- Hazardous Cliffs (WHCE)

Site Specific Hazard Signs:

Station: KA00010 Warning - Hazardous Cliffs (WHCS)
Station: KA00011 Warning - Hazardous Cliffs (WHCS)

**Management Signs:** 

Station: KA00010 End of Trail (NETS)



DLNR Division: DOFAW Island: Kauai Area Name: Keahua

Forestry Arboretum

Exposure to natural conditions: Stream crossings, shallow water with submerged hazards

**Entrance Hazard Signs:** 

Station: KA00013 Danger – No Diving or Jumping (WNDE)
Station: KA00015 Danger – No Diving or Jumping (WNDE)
Station: KA00013 Warning – Flash Flood (WFFE)
Station: KA00015 Warning – Flash Flood (WFFE)

Site Specific Hazard Signs:

Station: KA00014 Danger - No Diving or Jumping (DNDS) Station: KA00016 Danger - No Diving or Jumping (DNDS) Station: KA00017 Danger - No Diving or Jumping (DNDS) Station: KA00014 Warning - Flash Flood (WFFS) Station: KA00016 Warning – Flash Flood (WFFS) Station: KA00017 Warning – Flash Flood (WFFS)

